

FUEL INJECTION SYSTEM

Abstract

A fuel injection system for an internal combustion engine comprises a nozzle (2) with an inlet and a cam-driven plunger (5) forming a plunger chamber (7) which is connected to the inlet of the nozzle. The injection system also comprises a common rail (10) for fuel and a control valve (9) installed between the plunger chamber (7) and the common rail (10), wherein the control valve is able to open or close hydraulic communication between the plunger chamber and the common rail upon receiving an electrical control command. An electrically actuated nozzle control valve (21) is used for opening and closing of the nozzle (2). The system also comprises a means (11) for pressurizing the common rail and regulating pressure of the fuel in the common rail (10).